EIV
Technical Services, LLC

93 South Main Street Waterbury, VT 05676 Tel: 802-244-7453 Fax: 802-244-7492 99 -2729

Jun 6 7 48 AM '00

WASTE MANAGEMERY DIVIDION June 5, 2000

Mr. Chuck Schwer Director, Waste Management Division Department of Environmental Conservation State of Vermont Agency of Natural Resources Waterbury, Vermont 05671-0404

RE: Subsurface Investigation Results
Montpelier Federal Building
Facility ID #2330
87 State Street, Montpelier, Vermont

Dear Mr. Schwer:

On May 19, 2000, EIV Technical Services (EIV) personnel directed a limited subsurface investigation at the above referenced facility. This investigation was completed in response to the State of Vermont Department of Environmental Conservation's request for additional information concerning soil and groundwater conditions at the site.

Previous work at the site during renovations included the in-place closure of a 10,000-gallon underground storage tank (UST) used for heating oil. The tank was closed in-place due to its location near/under a concrete structure associated with the loading dock at the facility. The UST is contained within this concrete structure and during closure, soil contamination was noted adjacent to the tank. No subsurface investigation was completed outside of the retaining structure at that time. EIV's investigation was completed at the request of the DEC to determine if the contamination had left the retaining structure.

<u>Physical Setting</u> The Montpelier Federal Building is located at 87 State Street in downtown Montpelier, Vermont. The building is located on the north side of State Street, to the west of River Road. The setting is urban in nature, in that most of the surrounding land is occupied by buildings, parking lots, or roadways. The area immediately surrounding the site is commercial.

Description of Work EIV's investigation included advancing one boring to approximately 16' below ground surface (bgs) in accordance with work plans dated April 20, and May 2, 2000. The approximate location of the soil boring is indicated on the attached sketch of the site. Soils were screened in the field with a H-Nu photoionization detector (PID) for the presence of VOCs. Soils were recovered with a split spoon sampler, and samples were screened from 2.5 feet bgs to 16' bgs at approximate intervals of 1 foot. Due to the low level of VOCs detected by PID, a soil sample was collected at the groundwater level for laboratory analysis.

Site Investigation Results Montpelier Federal Building Facility ID #2330

<u>Field Screening Results</u> Field screening of soils from the boring revealed no soil samples with VOC levels in excess of 0.5 ppmV. No evidence of contamination was detected by PID to a depth of 10 feet bgs. VOCs were detected at a concentration of 0.5 ppmV by PID at 11.5 feet bgs, the approximate location of groundwater. However, continued screening of soils, to 16 feet, revealed no evidence of contamination. There was no visual or olfactory evidence of petroleum contamination during the investigation. Please see the attached soil-boring log for additional soils information.

<u>Laboratory Results</u> A soil sample was collected from the apparent location of the groundwater table, at approximately 11.5 feet bgs. This sample was stored in a cooler and transported to Endyne, Inc, of Williston, Vermont for analysis via Method SW 8260 for 8021B analytes, and Method SW 8015B for TPH 8015 DRO. Total petroleum hydrocarbons were detected at a concentration of 150 mg/kg (ppm). No 8021B target parameters were detected above method detection limits. No unidentified peaks were recorded during the analysis. A complete copy of the laboratory results is attached.

<u>Recommendations</u> Based on the site work completed, EIV believes that this site does not warrant further investigation, and respectfully requests that the site be granted a Sites Management Activities Completed (SMAC) designation.

If you have any questions, or require additional information, please feel free to contact our office.

Sincerely,

EIV Technical Services, LLC

Bill Lammer

Environmental Engineer

Attachments

C: Jack Barnes, Catamount Construction for General Services Administration

SOIL BORING LOG

PROJECT NAME: Montpelier Federal Building

PROJECT #: E1111

ADDRESS: 87 State Street, Montpelier, Vermont

BORING #: SB-2

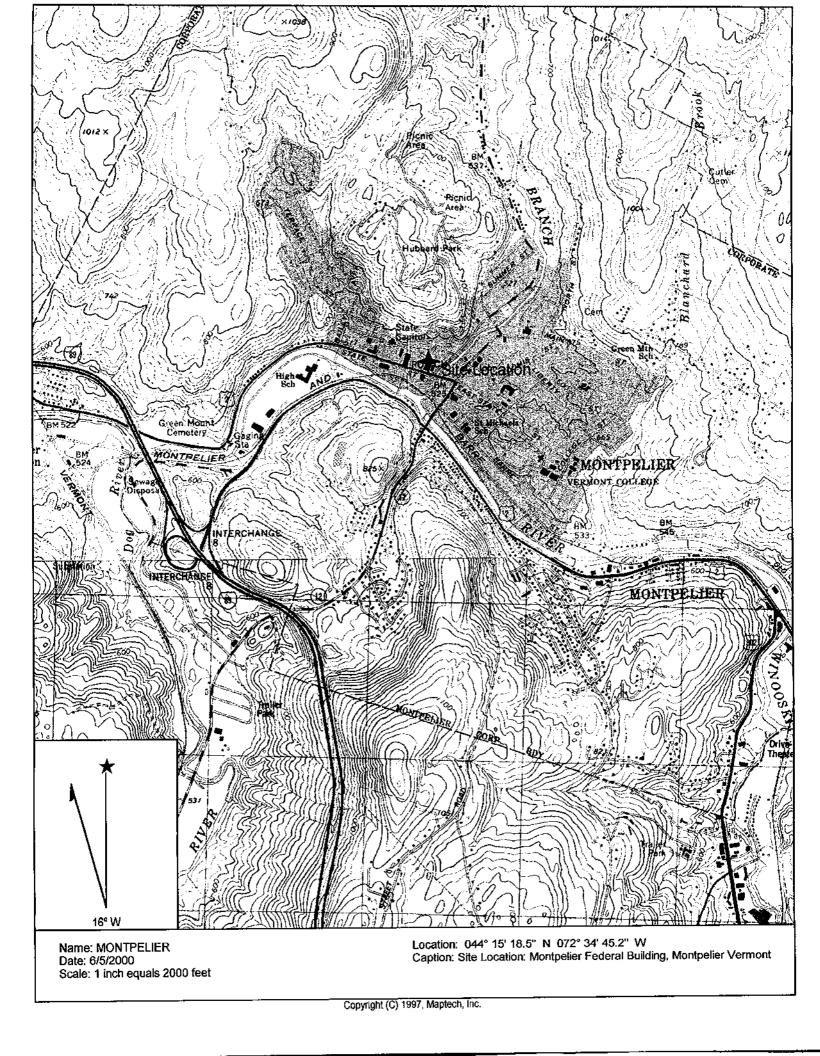
DATE COMPLETED: May 19, 2000

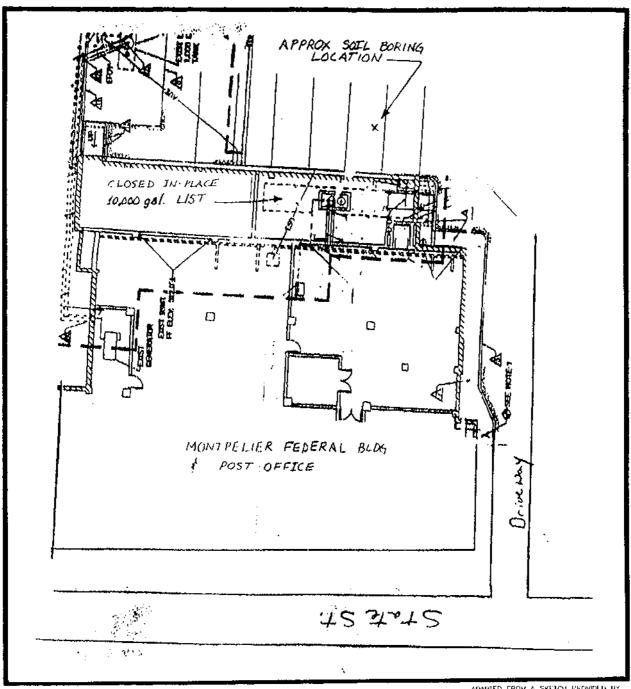
SUPERVISED BY: Bill Lammer, EIV

BORING COMPLETED BY: Green Mountain Boring, East Barre, VT

METHOD: Rotary Auger

DEPTH	<u> </u>		SAMP	LES			
(ft	No.	Reco-	Blow	Time	HNU/	SOIL DESCRIPTION	<u>REMARKS</u>
below		very	рег		OVA		
grade)		(ft)	6 in		(ppmv)		
0						Drilled 1st 1' - top 6" blacktop	
1							
2	S-1	18"	12/7/5/5	845am	0.0	brown SAND and GRAVEL, CLAYEY, trace SILT	PID @ 2.5'
3				•	0.0		PID @ 3.5'
4	S-2	12"	3/3/13/5			vf brown SILTY SAND, CLAYEY	
5					0.0	shally ROCK at bottom 1"	PID @ 5.5' no odor/no staining
6	S-3	12"	6/3/2/2			vf brown SILTY SAND, CLAYEY increasing fine SAND w/ depth	
7					0.0	damp bottom 1/2 recovery	PID @ 7.5' no odor/no staining
8	S-4	18"	7/5/3/3		0.0	tan CLAYEY soils w/some fine SILT	PID @8.5' sample damp
9		<u> </u>			0.0 0.0	grey CLAYEY soils w/ increasing fine SILT to bottom	PID @ 9.5' PID @ shoe
10	S-5	18"	11/12/ 16/18		0.0 	fine GRAVEL	
11			10,10		0.5	apparent Groundwater @ 11.5' bottom 6" WET	PID @ 11.5' Soil sample collected
12	S-6	18"	13/8/7/5		0.0	fine GRAVEL w/ trace SILT wet	PID @ 12.5'
13					0.0 0.0		PID @ 13.5' PID @ shoe
14	S-7	18"	6/5/3/3		0.0	coarse GRAVELLY SAND wet	PID @14.5'
15					0.0	}	PID @15.5'
16							
17					-		
18							•
19							
20							
21		<u>.</u>					





NOT TO SCALE

ADAPTED FROM A SKETCH PROVIDED BY CATAMOUNT CONSTRUCTION, MORETOWN, VI

Figure 2
Approximate Soil Boring Location
Montpelier Federal Building
Facility ID #2330
Montpelier, Vermont

EIV

TECHNICAL SERVICES, LLC

93 SOUTH MAIN ST. WATERBURY, VT 05676

June 2000 WDSL PROJECT NO. E1111





RECEIVED JUN 0 2 2000

LABORATORY REPORT

Laboratory Services

160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

EIV Tech. Svcs., Inc.

93 S. Main St.

Waterbury, VT 05676

Attn: Bill Lammer

PROJECT: Montpelier Fed. Building

ORDER ID: 7432

RECEIVE DATE: May 19, 2000

REPORT DATE: May 31, 2000

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Different groups of analyses may be reported under separate cover.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

1/1/

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits, unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D. Laboratory Director



Laboratory Services

160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

LABORATORY REPORT

CLIENT: EIV Tech. Svcs., Inc.

PROJECT: Montpelier Fed. Building

REPORT DATE: May 31, 2000

ORDER ID: 7432

DATE RECEIVED: May 19, 2000

SAMPLER: BL

ANALYST: 725

Ref. Number: 155207	Site: Soil Boring @ 1	1.5'	Date Sampled: May 19, 2000	Time: 9:45 AM		
Parameter	Result	<u>Unit</u>	Method	Analysis Date		
MTBE	< 20.0	ug/kg, dry	SW 8260	5/26/00		
Benzene	< 10.0	ug/kg, dry	SW 8260	5/26/00		
Toluene	~ 10.0	ug/kg, dry	SW 8260	5/26/00		
Ethylbenzene	< 10.0	ug/kg, dry	SW 8260	5/26/00		
Xylenes, Total	< 20.0	ug/kg, dry	SW 8260	5/26/00		
1,3,5 Trimethyl Benzene	< 10.0	ug/kg, dry	SW 8260	5/26/00		
1,2,4 Trimethyl Benzene	< 10.0	ug/kg, dry	SW 8260	5/26/00		
Naphthalene	< 50.0	ug/kg, dry	SW 8260	5/26/00		
UIP's	0.		SW 8260	5/26/00		
Percent Solid	91.	%	SW 8260	5/26/00		
Surrogate 1	97.%	%	SW 8260	5/26/00		



Laboratory Services

160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

LABORATORY REPORT

EIV Tech. Svcs., Inc.

93 S. Main St.

Waterbury, VT 05676

Attn: Bill Lammer

PROJECT: Montpelier Fed. Building

ORDER ID: 7432

RECEIVE DATE: May 19, 2000

REPORT DATE: May 31, 2000

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Different groups of analyses may be reported under separate cover.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

17m

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits, unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D. Laboratory Director



Laboratory Services

160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

LABORATORY REPORT

CLIENT: EIV Tech. Svcs., Inc.

PROJECT: Montpelier Fed. Building

REPORT DATE: May 31, 2000

ORDER ID: 7432

DATE RECEIVED: May 19, 2000

SAMPLER: BL

ANALYST: 128

Ref. Number: 155207

Site: Soil Boring @ 11 5'

Date Sampled: May 19, 2000

Time: 9:45 AM

Parameter

Result

<u>Unit</u>

Method

Analysis Date

TPH 8015 DRO

150.

mg/kg

SW 8015B

5/29/00

CHAIN-OF-CUSTODY-RECORD



Williston, Vermont 05495 (802) 879-4333

Project Name: MONTPELLER FED. BLDG, STATE CT. MONTPELLER VT Endyne Order ID: (Lab Use Only) 7432 -3					Reporting Address: EIV 93 S MAIN WATERBURY UT 0567 Company: EIV Bill LAMMER Contact Name/Phone #: 802.244.7458				676	Billing Address: E/V Fig. Sampler Name: BILL LAMMER Phone #: 802.244.7453					
Ref# (Lab Use Only	Sample Identification			Matrix	arix R C C Date/Time			No. Type/Size		Field Results/Remarks		Results/Remarks	Analysis Required	Sample Preservation	Rush
[5520]	SOIL BORIL	SOIL BORING @ 11,5'			11L X 5/19/00 9:45		9:45	/	403_	NO ODOR/NO SHEEN			19,23	שמפנת	
					\vdash			-							
					上							· · · · · · · · · · · · · · · · · · ·			
1	+				-	-		-	-						
					<u> </u>	 _ 		<u> </u>						1	
				<u> </u>	<u> </u>			<u></u>							<u></u>
Relinguished	r.Ki	S	Date/Time 19/00 12/25	1 /	eived b	 (BO)	n Jou	ui	5-14-	00)	Receiv	ed by:		Date/Tin	ne
New York	State Project: Yes _	N	ю Х				Requested A	nalys	es						
1 pH		11	TKN			Total Sc	olids	10-1	Sulfate		21	1664 TPH/FOG	26	8270 PAH	
2 Chlorid		7	Total Pierr B			TSS		 	Coliform (Specify	y)	22	8015 GRO	27	PP13 Metals	
3 Ammon		8	Total Diss. P			TDS Treshidir			8021B		23	8015 DRO	28	RCRA8 Metals	\$
5 Nitrate		10	Alkalinity			Turbidit Conduct			8021B 8010/8020	-#	24 25	8260/8260B	30	<u>[</u>	
	Asis Total Diss.) Aş	اا g, Al	<u> </u>	Be, Ca, (Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Si, Sr, Ti, Tl, V, Zn							
									33						
34 Other															